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EXAMINER

WRIGHT, ANDREW D

ART UNIT PAPER NUMBER

3617

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/823,008

Applicant(s)

EAGLES ET AL.

Examiner

Andrew Wright

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-36 and 44-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-31, 33 and 35-51 is/are rejected.
- 7) ☒ Claim(s) 32 and 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the warp and weft fibers and the taper formed by gradually eliminating warp yarn (claims 30 and 45) must be shown or the feature(s) canceled from the claim(s). Furthermore, the warp and weft fibers and the taper formed by drawing in the warp yarns (claims 31 and 46) must be shown or the feature(s) canceled from the claim(s). Furthermore, the knitted taper formed by gradually dropping knitting needles (claims 32 and 47) must be shown or the feature(s) canceled from the claim(s). Furthermore, the braided taper formed by adjusting the speed of the take up (claims 34 and 49) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement

Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claim 29 is objected to. Claim 29 recites "a front end and a rear end". Claim 29 subsequently recites "at least one front end or rear end". The subsequent recitation should include the word "the" or "said". Appropriate correction is required.
3. Claims 30-32 and 34 are objected to. Claim 30 recites "said end". A front end and a rear end have been recited, and "said end" could refer to either or both. Claims 31, 32, and 34 have similar recitations. It will be assumed for examination that these recitations refer to the tapered end. Appropriate correction is required.
4. Claim 44 is objected to. Claim 44 recites "a front end and a rear end". Claim 44 subsequently recites "at least one front end or rear end". The subsequent recitation should include the word "the" or "said". Appropriate correction is required.
5. Claims 45-47 and 49 are objected to. Claim 45 recites "said end". A front end and a rear end have been recited, and "said end" could refer to either or both. Claims 46, 47, and 49 have similar recitations. It will be assumed for examination that these recitations refer to the tapered end. Appropriate correction is required.
6. Claims 45, 46, 48, and 50 are objected to. The claims all recite "a ... tubular structure". A tubular structure has already been positively recited in claim 44, and subsequent positive recitations are improper. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 30, 31, 45, and 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 30 recites the broad recitation "fibers or yarns", and the claim also recites "yarns" which is the narrower statement of the range/limitation. Claims 31, 45, and 46 have similar recitations and are rejected for the same reason.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 44 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Hawthorne et al. (US 2,997,973). Regarding claim 44, Hawthorne shows a vessel comprising a tubular structure (1) that is: elongate, flexible, made of fabric, impervious, and has front and rear sealed ends. The vessel comprises a pipe for filling and emptying cargo. The vessel is woven in one piece as a continuous tube. The front end (2) is tapered to a circumference that is less than the circumference of the central portion. The rear end (10) is also tapered to a circumference that is less than the circumference of the central portion. Both the front and rear ends are formed by weaving.

12. Regarding claim 51, both the front end and rear end are formed by weaving. Both the front end and rear end are tapered to respective circumferences that are less than the circumference of the central portion of the tube (1).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 29 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawthorne et al. (US 2,997,973). Hawthorne shows a vessel comprising a tubular structure (1) that is: elongate, flexible, made of fabric, impervious, and has front and rear sealed ends. The vessel comprises a pipe for filling and emptying cargo. The vessel is woven in one piece as a continuous tube. The front end (2) is tapered to a circumference that is less than the circumference of the central portion. The rear end (10) is also tapered to a circumference that is less than the circumference of the central portion. Both the front and rear ends are formed by weaving. Hawthorne does not explicitly disclose the recited method steps. The method steps, however, are inherent in the making and use of the Hawthorne apparatus. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to devise the recited method steps. The motivation would be to make and use the Hawthorne apparatus.

15. Claims 44, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawthorne et al. (US 2,997,973) in view of Shimosono et al. (US 6,021,915). Hawthorne discloses the elements of claim 44. Hawthorne discloses weaving. Hawthorne does not disclose warp and weft fibers or yarns. Shimosono shows a flexible fabric tubular structure for holding fluid. The tube is woven using warp and weft yarns. Such is well known and common. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify

Hawthorne by using warp and weft yarns in the weave of the tubular structure. The motivation would be to use weaving techniques that are well known in the art.

16. It is noted that the claim 45 recitation "formed by gradually eliminating ... as said end is woven" is a product by process limitation. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. See MPEP 2113. Hawthorne in view of Shimosono discloses the structure.

17. It is noted that the claim 46 recitation "formed by drawing in ... as said end is woven" is a product by process limitation. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. See MPEP 2113. Hawthorne in view of Shimosono discloses the structure.

18. Claims 33, 35, 44, and 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawthorne et al. (US 2,997,973) in view of Fowler et al. (US 4,055,201). Hawthorne discloses the elements of claim 44. Hawthorne discloses weaving. Hawthorne does not disclose knitting and braiding. Fowler shows a flexible tubular structure for holding fluids. The tubular structure is made of fabric and can be



woven, braided; or knitted. Thus Fowler shows the equivalence of a woven, braided, or knitted fabric tubular vessel. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hawthorne by making the tubular vessel a knitted tubular vessel or a braided tubular vessel. The motivation would be to make and use the vessel using fabrics that are well known in the art.

19. It is noted that the claim 47 recitation “formed by gradually dropping ... of said end to create the taper” is a product by process limitation. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. See MPEP 2113. Hawthorne in view of Fowler discloses the structure.

20. It is noted that the claim 49 recitation “formed by adjusting the speed ... that is being braided” is a product by process limitation. Product-by-process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. See MPEP 2113. Hawthorne in view of Fowler discloses the structure.

21. Regarding claims 33 and 35, Hawthorne in view of Fowler, as described above, discloses a woven, or knitted, or braided tubular structure. Hawthorne in view of Fowler

does not explicitly disclose the recited method steps. The method steps, however, are inherent in the making and use of the modified Hawthorne apparatus. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to devise the recited method steps. The motivation would be to make and use the modified Hawthorne apparatus.

***Allowable Subject Matter***

22. Claims 32 and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

23. Claims 30 and 31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

24. Any inquiry concerning this communication should be directed to examiner Andrew D. Wright at telephone number (703) 308-6841. The examiner can normally be reached Monday-Friday from 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano, can be reached at (703) 308-0230. The fax number for official communications is 703-872-9306. The fax number directly to the examiner for unofficial communications is 703-746-3548.

The examiner and his supervisor are relocating to the new Office campus in Alexandria, VA, on or around April 5, 2005. Telephone calls to the examiner and/or

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examiner's supervisor after that date should be directed as follows. The examiner's new telephone will be (571) 272-6690. The examiner's fax number for unofficial communications will be (571) 273-6690. The supervisor's new telephone number will be (571) 272-6684.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew D. Wright  
Patent Examiner  
Art Unit 3617

*Ar 1/19/05*  
**ANDREW D. WRIGHT**  
**PRIMARY EXAMINER**